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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,170	07/29/2003	Bruce Wallman	CHA920030012US1	7168

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EXAMINER	
TESLOVICH, TAMARA	
ART UNIT	**PAPER NUMBER**
2137	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/629,170	WALLMAN, BRUCE
	Examiner	Art Unit
	Tamara Teslovich	2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to the Applicant's Remarks filed April 11, 2007.

Claims 1-22 are pending and herein considered.

Response to Arguments

Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the examiner how a message with no, or "zero length" may be sent and received.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4, 7-12, and 15-22 are rejected under 35 U.S.C. 102(a) as being anticipated by Gunter Ollmann's Custom HTML Authentication – Best Practices on Securing Custom HTML Authenitcation Procedures, hereinafter referred to as *Ollmann*.

As per **claim 1**, Ollmann teaches a system for addressing denial of service attacks directed at a web resource, comprising a system for detecting improper requests; and a system for responding to improper requests that issues an HTTP "OK" response code when improper request is detected (page 5).

As per **claim 2,** Ollmann teaches wherein the system for responding stops issuing HTTP "OK" response codes and issues no response after a predetermined number of improper requests are detected (page 4 line 6 "automatically lockout after a threshold has been reached (e.g. three authentication failures)").

As per **claim 3**, Ollmann teaches wherein a request is deemed improper if the request is received from an unexpected host (page 4 line 35 "it may be possible to dynamically block an offending IP address" and line 32 "the web-based application must be able to track and log connections relating to the source IP address of the web client").

As per **claim 4**, Ollmann teaches wherein a request is deemed improper if the request has a zero length (pages 4-5).

As per **claim 7**, Ollmann teaches wherein the HTTP "OK" response code comprises an HTTP 204 "OK" message code (pages 4-5).

As per **claim 8**, Ollmann teaches wherein the system for responding to improper requests includes a response protocol that utilizes a standard error handling procedure for a first improper request from a requesting resource, issues an HTTP OK response code for N subsequent improper requests from the requesting resource, and then stops responding to the requesting resource altogether (page 4 line 6 "automatically lockout after a threshold has been reached (e.g. three authentication failures)").

As per **claim 9**, Ollmann teaches wherein the web resource comprises a server (pages 1-3).

As per **claim 10**, Ollmann teaches a method for addressing denial of service attacks directed at a web resource (page 5), comprising: receiving messages at the web resource; analyzing each message and determining if the message is improper; storing the source address of a message if the message is improper (pages 1-5); responding to a first improper message from an identified source address with an HTTP error response; responding to a set of subsequent improper messages from the identified source address with HTTP "OK" response codes (page 5); and stopping responses to the identified source address for all received improper messages after the set of subsequent improper messages have been responded to (page 4 line 6 "automatically lockout after a threshold has been reached (e.g. three authentication failures)").

As per **claim 11**, Ollmann teaches wherein a message is deemed improper if the message is received from an unexpected host (page 4 line 35 "it may be possible to dynamically block an offending IP address" and line 32 "the web-based application must

be able to track and log connections relating to the source IP address of the web client").

As per **claim 12**, Ollmann teaches wherein a message is deemed improper if the message has a zero length (pages 4-5).

As per **claim 15**, Ollmann teaches wherein the HTTP "OK" response code comprises an HTTP 204 "OK" message code (pages 4-5).

As per **claim 16**, Ollmann teaches wherein the HTTP "OK" response comprises an HTTP 200 "OK" message code (pages 4-5).

As per **claim 17**, Ollmann teaches a program product stored on a recordable medium for addressing denial of service attacks directed at a web resource, comprising means for receiving messages at the web resource; means for analyzing each message and determining if the message is improper; means for storing the source address of a message if the message is improper (page 4 line 32 "the web-based application must be able to track and log connections relating to the source IP address of the web client. The application should be able to identify authentication failures to multiple user accounts initiated by a single IP address"); means for responding to a first improper message from an identified source address with an HTTP error response; and means for responding to subsequent improper messages from the identified source address with HTTP "OK" response codes (page 4 line 6 "automatically lockout after a threshold has been reached (e.g. three authentication failures)").

As per **claim 18**, Ollmann teaches means for stopping responses to the identified source address after a predetermined number of subsequent improper messages have

been received (page 4 line 6 "automatically lockout after a threshold has been reached (e.g. three authentication failures)").

As per **claim 19**, Ollmann teaches wherein a message is deemed improper if the message is received from an unexpected host; if the message has a zero length; if the message is neither an expected HTTP "post" nor an expected HTTP "get" command; or if the message includes a HTTP "post" or "get" command with unknown arguments (page 4 line 35 "it may be possible to dynamically block an offending IP address" and line 32 "the web-based application must be able to track and log connections relating to the source IP address of the web client").

As per **claim 20**, Ollmann teaches wherein the HTTP "OK" response codes comprise HTTP 204 "OK" response codes (pages 4-5).

As per **claim 21**, Ollmann teaches wherein messages that are deemed proper are passed to the web resource for further processing (pages 3-4).

As per **claim 22**, Ollmann teaches wherein the web resource is a web server (pages 1-3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims **5, 6, 13, and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunter Ollmann's Custom HTML Authentication – Best Practices on Securing Custom HTML Authenitcation Procedures ("Ollmann") as applied to claims 1-4, 7-12, and 15-22 above, and further in view of The World Wide Web Seucirty FAQ Number 8 entitled "Securing against Denial of Service Attacks" ("W3C").

As per **claim 5**, Ollmann fails to teach wherein a request is deemed improper is an HTTP "post" or HTTP "get" command is expected and neither an HTTP "post" nor an HTTP "get" command is received.

W3C teaches wherein a request is deemed improper if an HTTP "post" or HTTP "get" command is expected and neither an HTTP "post" nor an HTTP "get" command is received (page 10).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include within Ollmann's system the ability to deem a request improper when an HTTP post or get is expected and neither is received as described in W3C to provide for a more secure system protected against attacks such as trinoo, tfn2k and other attacks that are known to utilize alternate packets.

As per **claim 6**, Ollmann fails to teach wherein a request is deemed improper if the request includes a HTTP "post" or "get" command with unknown arguments.

W3C teaches wherein a request is deemed improper if the request includes a HTTP "post" or "get" command with unknown arguments (page 10).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include within Ollmann's system the ability to deem a request improper when an HTTP post or get is received with unknown arguments as described in W3C to provide for a more secure system protected against attacks such as trinoo, tfn2k and other attacks that are known to utilize packets with unknown arguments.

As per **claim 13**, Ollmann fails to teach wherein a request is deemed improper is an HTTP "post" or HTTP "get" command is expected and neither an HTTP "post" nor an HTTP "get" command is received.

W3C teaches wherein a request is deemed improper if an HTTP "post" or HTTP "get" command is expected and neither an HTTP "post" nor an HTTP "get" command is received (page 10).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include within Ollmann's system the ability to deem a request improper when an HTTP post or get is expected and neither is received as described in W3C to provide for a more secure system protected against attacks such as trinoo, tfn2k and other attacks that are known to utilize alternate packets.

As per **claim 14**, Ollmann fails to teach wherein a request is deemed improper if the request includes a HTTP "post" or "get" command with unknown arguments.

W3C teaches wherein a request is deemed improper if the request includes a HTTP "post" or "get" command with unknown arguments (page 10).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include within Ollmann's system the ability to deem a request improper when an HTTP post or get is received with unknown arguments as described in W3C to provide for a more secure system protected against attacks such as trinoo, tfn2k and other attacks that are known to utilize packets with unknown arguments.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara Teslovich whose telephone number is (571) 272-4241. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

T. Teslovich

Cynthia Britt 6-22-07

CYNTHIA BRITT
PRIMARY EXAMINER